

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

7282
Page 2
UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH ADMINISTRATION
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
WASHINGTON 25, D. C.

In cooperation with State, Federal and Other Agencies

COTTON INSECT CONDITIONS FOR WEEK ENDING JULY 23, 1948
(Tenth Cotton Insect Survey Report for 1948)

No reports of shortages of insecticides for cotton insect control. The cotton leafworm now occurs in 8 Texas counties. At this time a year ago it had been reported from only 3 counties. The bollworm is general prevalent over wide areas in Texas and locally destructive. Eggs and small larvae are present in many fields in Oklahoma.

Excerpts relating to cotton insects and their control taken from the WEEKLY COTTON WEATHER BULLETIN, issued by the Weather Bureau, U. S. Department of Commerce, New Orleans, La., for the week ending July 27, 1948.

TEXAS: "Weather favorable for holding weevil in check."

OKLAHOMA: "Weather mostly favorable for weevil activity; grasshopper damage cotton, alfalfa, other crops heavy but abating somewhat."

ARKANSAS: "Weather very favorable for holding weevil in check."

LOUISIANA: "Weather favorable for holding weevil in check."

MISSISSIPPI: "Weather favorable for holding weevil in check."

ALABAMA: "Weather favorable for weevil control."

GEORGIA: "Weather moderately favorable for weevil activity to favorable for holding weevil in check."

SOUTH CAROLINA: "Weather favorable for holding weevil in check."

NORTH CAROLINA: "Temperatures averaged near 3 degrees above normal; cotton progress and condition good all sections."

ARIZONA: "Cotton coming along nicely with some bollworm activity reported Pima County."

BOLL WEEVIL

TEXAS: Dry, hot weather over the State was unfavorable for weevil development and there was little change in the infestation. The average boll weevil infestation in 523 fields in 31 counties was 20% punctured squares. No weevils were found in 82 of the fields examined. In 310 fields the infestations ranged up to 25% punctured squares; in 83 fields from 26 to 50%; and in 48 fields more than 50% of the squares were punctured. Most of the cotton in the southern third of the State has matured and is beyond the point of boll weevil damage although some fields of late-planted or rank-growing cotton in the northern portion of this area are being damaged by weevils.

In the vicinity of Waco, Texas, the boll weevil is now about as serious as it has been during the third week of July in any recent year. The average percentages of boll weevil punctured squares in the fields around Waco during the past week and the same period during previous years were as follows:

<u>Year</u>	<u>Percent</u>	<u>Year</u>	<u>Percent</u>
1948	25	1944	11
1947	15	1943	3
1946	26	1942	7
1945	27	1941	28

OKLAHOMA: Weather conditions continued favorable for weevil development in most of the cotton producing areas of the State. The weevil situation in the eastern third of the State is critical and is threatening in the central areas. The average boll weevil infestation in 108 fields in 16 counties was 16%. No punctured squares were found in 18 of the fields examined. In 64 fields the infestations ranged up to 25% punctured squares; in 13 fields from 26 to 50%; and in 13 fields in Muskogee, Sequoyah, McIntosh, and LeFlore Counties more than 50% of the squares were punctured.

LOUISIANA: Cotton is maturing rapidly in the southern half of the State. Insecticides are being applied for boll weevil control in some fields in East Carroll, Madison, Tensas and Concordia Parishes and in the south central areas. The average infestation in 249 fields in 11 parish was 20% punctured squares, ^{as compared} to 14% last week and 11% two weeks ago and to 21% in 1947 and 51% at this time in 1946. No punctured squares were found in 10 fields in Morehouse, Evangeline, St. Landry, Rapides, and Lafayette Parishes. In 179 fields the infestation ranged up to 25%; in 30 fields from 26 to 50%; and in 30 fields more than 50% of the squares were punctured. The highest infestations were in Concordia, Lafayette, Acadia, Tensas, St. Landry, Evangeline, and Rapides Parishes.

ARKANSAS: In the examination of 56 fields in 6 southeastern counties the average infestation was 8% punctured squares as compared to 38% in 1947 and 37% in 1946. No punctured squares were found in 23 fields. In 25 fields the infestation ranged up to 25% and in 8 fields in Chicot and Desha Counties more than 25% of the squares were punctured.

MISSISSIPPI: Boll weevils were found in 238 of the 431 fields examined in 35 counties. The average infestation in the 238 fields was 16% punctured squares which compares with 14% a week ago and 23% on this date last year. The situation differs little from last week, as few weevils were observed in the northern section of the Delta while rather heavy infestations were reported from Issaquena, Sharkey, Warren, Washington, and Yazoo Counties. In the hill section of the State many counties still reported low infestations, although scattered farms needed poisoning. (Clay Lyle, July 26)

In the Delta Counties the boll weevils are spreading into more fields as 48% of the fields examined had weevils as compared to 42% last week and 36% the previous week. Of the 431 fields examined by entomologists 332 were in the 19 Delta counties. The average percent of squares punctured in the 159 infested fields examined in the Delta was 16%, the same as the 16% average last week. No boll weevils were found in 173 Delta fields including all of the 37 fields examined by entomologists in Coahoma, Grenada, Tallahatchie and Tate counties. Most of the fields examined in Bolivar, DeSoto, Humphreys, Panola, Sunflower, and Tunica counties were still free of weevils. The

heaviest infestations were found in Yazoo County where all of the 15 fields examined were infested. One field had only 9% punctured squares but in the other 14 fields the infestations ranged from 22 to 90% punctured squares. B. J. Young, Delta and Pine Land Company, in the southern part of Bolivar County, reports boll weevils in 420 of the 442 fields examined but no field had more than 35% punctured squares and only 5 fields had as many as 30% punctured squares.

In Monroe County, in the northeastern part of the State 20 fields were examined by F. F. Bibby but only 7 of them had more than 8% punctured squares. The fields with highest infestations had 22%, 35%, and 50% punctured squares.

ALABAMA: "Great increase in boll weevil infestations in Alabama. Also increased in dusting but operations hampered by rainfall." (F. S. Arant, Entomologist, Agricultural Experiment Station, Auburn, July 28)

GEORGIA: The boll weevil infestations continue to be comparatively low in all sections of the State. In only 23 of the 141 fields examined in 34 counties were more than 25% of the squares punctured. The highest infestations were reported from Turner County where 5 of the 6 fields examined had more than 60% of the squares punctured and in the other field 28% of the squares were punctured. Fields with more than 25% punctured squares were reported also in Crisp, Mitchell, Worth, Tift, Houston, Carroll, Harris, Lacon, Pike, and Taylor Counties. In 4 fields in Clarke, Elbert, Oconee, and Wilkes Counties in the northeastern part of the State no weevils were found. Only 4 of the 35 fields examined in the northeastern counties had more than 10% of the squares infested. These fields are in Elbert, Hart, Newton, and Wilkes counties. Most of the cotton in the Piedmont area is still susceptible to serious weevil damage.

SOUTH CAROLINA: Local rains and high temperatures were favorable for cotton growth but squares are becoming scarce in many fields and cotton is maturing rapidly on sandy lands. Boll weevils continue to emerge from squares in large numbers and the infestation is rising in some fields. The average infestation in 110 fields in 24 counties was 45% punctured squares. The infestations ranged up to 25% in 42 fields; in 31 fields from 26 to 50% and 37 fields more than 50% of the squares were punctured. Boll weevils are beginning to move from field to field and most fields need poison to protect the bolls that are set.

"The weather has been favorable for weevil increase all over the state and their increase in numbers and damage will be noticeable from now on. Farmers are advised to continue dusting where it is necessary. Remember that late dusting of vigorously growing cotton will always pay good dividends. Protect those bolls until they are too large for the weevil to puncture." (L. M. Sparks, Jr. July 20)

NORTH CAROLINA: Weather conditions continued favorable for boll weevils and the average infestation in the 105 fields examined in 19 counties was 23% punctured squares as compared to 10% last week. No weevils were found in 4 fields as compared to 12 fields last week and 30 fields the previous week. In 16 infested fields the infestations ranged from 11 to 25% punctured squares and in 9 fields the range was between 26 and 50% punctured squares. There were 24 fields in 6 counties, Scotland, Robeson, Sampson, Hoke, Cumberland, and Harnett where more than 50% of the squares were punctured. (J. T. Conner Jr., July 24)

COTTON FLEAHOPPER, TARNISHED PLANT BUG
RAPID PLANT BUG, AND OTHER MIRIDAE

TEXAS: The cotton fleahopper damage is about over in most areas. The average infestation in 529 fields in 35 counties was 8 per 100 terminals as compared to 10 the previous week. In only 3 fields in Caldwell and Williamson Counties were more than 50 hoppers per 100 terminals found.

OKLAHOMA: Cotton fleahopper infestations remain low. The average infestation in 108 fields in 16 counties was 4 per 100 terminals. No hoppers were found in 53 of the fields examined. In 50 fields, 10 or less fleahoppers were found per 100 terminals. In only 3 fields in Cotton County were there more than 50 cotton fleahoppers per 100 terminals.

LOUISIANA: "Tarnished plant bugs are persisting in many fields in the northwestern portion of the State and their oviposition punctures in the terminal growth are producing a ragging effect which is quite pronounced in some fields." (L. D. Newsom, July 23)

MISSISSIPPI: The tarnished plant bug was reported in 42 of the 332 Delta fields examined. The rapid plant bug was reported in 32 Delta fields as compared to 16 the previous week. Cotton fleahoppers were found in 2 fields in Issaquena County near the Mississippi River levee. In one of these fields fleahoppers occurred at the rate of 20 per hundred net strokes. The mirid, Neurocolpus nubilus, was noticed in 14 Delta fields.

BOLLWORM

TEXAS: The bollworm continues to be a serious pest of cotton throughout the northern two-thirds of the State. Many growers are using insecticides to protect their cotton from bollworms and boll weevils.

In 53 fields examined in the vicinity of Waco, there was an average of two bollworm moth eggs and 10 bollworms per 100 cotton terminals examined. Bollworm injured squares averaged 17%. The bollworm infestation is extremely heavy in many fields. It is difficult to control because of adverse weather conditions. The high winds that have prevailed have prevented many cotton growers from applying insecticides when they could have been used to best advantage.

OKLAHOMA: Bollworm eggs and small larvae can now be found in many fields. (C. F. Stiles, July 24)

MISSISSIPPI: Damage to squares typical of bollworm injury was reported from only 5 of the 332 fields examined in the Delta.

GEORGIA: Bollworms have not appeared in dangerous numbers even in the Southern Coastal plain counties.

SOUTH CAROLINA: No bollworm infestations have been found.

ALABAMA: Little evidence of bollworm. (F. S. Arant, July 28)

NEW MEXICO: Bollworms have appeared in Chaves and Eddy counties in unusual numbers for this time of the year and dusting is general.

ARIZONA: Bollworms are increasing in the Sahuarita area of the Santa Cruz Valley and dusting for their control will begin when weather permits.

COTTON LEAFWORM

TEXAS: Cotton leafworms have now been reported in eight counties: Refugio, Hidalgo, Calhoun, Jackson, San Patricio, Victoria, Laverick, and Matagorda Counties. At this date in 1947 the leafworms had been reported in only 3 counties, Calhoun, Refugio and Nueces.

COTTON APHID

MISSISSIPPI: The cotton aphid became more numerous during the week in the Delta as they were reported in 25 fields as compared to 10 fields last week. In no case was the infestation considered serious.

GEORGIA: "Aphids are on the increase in the Coastal Plain region, and most fields dusted with straight calcium arsenate show dangerous populations present. In such fields defoliation has commenced in many cases and loss of crop is likely. Undusted cotton shows higher populations than usual, but cotton dusted with any of the 'organic' materials rarely show more than very light infestations. Aphid populations in north Georgia still appear to be very light, no reports showing sufficient numbers to make special protective measures advisable." (P. M. Gilmer, July 24)

ALABAMA: "Light spotted aphid infestations." (F. S. Arent, July 28)

MISCELLANEOUS INSECTS

MISSISSIPPI: Grasshoppers continued to cause damage to margins of cotton fields in Bolivar and Sharkey Counties where it has been necessary to control them by the use of insecticides.

SOUTH CAROLINA: A few light infestations of the red spider and the cotton aphid have been found.

While making boll weevil infestation records in 157 fields the county agricultural agents in 34 counties reported aphids in only 2 fields, red spiders in 1 field, bollworms in 6 fields, cotton fleahoppers in 4 fields, and thrips in 2 fields. (L. H. Sparks, Jr., July 17)

NORTH CAROLINA: Light to moderate red spider infestations were observed in 10 of the 105 fields in which boll weevil infestation records were made. (J. T. Conner, Jr., July 24)

ARIZONA: Heavy infestations of white flies have been reported in several cotton fields in the Salt River Valley.

ARKANSAS: A worm taken from a cotton plant on July 16, 1948 by S. W. Irby, Watson, Desha County, Arkansas, proved to be a cotton square borer Strymon molinus (Hbn). The cotton square borer has been reported from several states this season.

INSECTS ON IRRIGATED COTTON OF THE SOUTHWEST

ARIZONA: Injurious hemipterous insect populations on cotton in the Salt River Valley remained about the same as the previous week. Large cotton scrooges throughout the Valley were dusted or sprayed with good results in all fields observed. Heavy infestations of white flies were noted in several cotton fields.

Hemipterous insect populations in Pinal County remain low in many fields, however, dusting is general throughout the area. Some fields have been sprayed. There was an increase in injurious hemipterous insect populations throughout the Santa Cruz Valley but no insecticides have been used for their control thus far. Bollworm eggs were found in large numbers in the Marana area. Arrangements are being made to dust several thousand acres of cotton by airplanes if bollworms appear in damaging numbers.

NEW MEXICO: Sweeping made in Chaves County showed counts of injurious hemipterous insects ranged up to 14 per 100 net strokes. Lygus bugs and cotton fleahoppers were the predominating insects. No stink bugs were found. The populations in Eddy County remain low.

TEXAS: There was little change in the hemipterous insect populations in the El Paso Valley. Sweepings made in cotton fields ranged up to 22 injurious insects per 100 strokes. Many fields were dusted during the week for cotton insect control. Stink bugs were observed in some fields in the Presidio Valley but not in sufficient numbers to warrant control.

PREPARED JULY 29, 1948

